

## **QUALITY CERTIFICATE**

Vessel	"Submitted Samples	Port	Providence, RI	Report	011105
Customer	Sprague Energy	Date	January 4, 2004	Reference	
Operation	Analysis	Terminal	Sprague Providence	Sample #	685855

Name of material being tested Description of sample source Samples Drawn by (company) Samples Tested by (company)

## No 6 Fuel Oil

Shore Tank#6 After Discharge BSi Inspectorate BSi Inspectorate

Tests being Performed	Test method	Sample Results	
Gravity API @ 60F / Denisty	D - 4052	440	0.004
Flash Point, PMCC, F	D - 4052 D - 93	11.2 /	0.9913
Viscosity cSt @ 122F	D - 445	185	
Viscosity SSF @ 122F	D - 445 D - 2161	224.0	
Pour Point C / F	D - 97	106.0	
Sulfur, Wt%	D - 4294	9/48	
Water and Sediment, Vol %	D - 4294 D - 1796	0.933	
		<.01	
Sediment by Extraction, wt%	D - 473	0.53	
Water by Distillation, Vol%	D - 95	0.3	
Gross Heat of Combustion, BTU / Ib	D - 240	18,483	
Gross Heat of Combustion, BTU / gal	D - 240	152,636	
Ash, wt %	D - 482	0.0496	
Vanadium, ppm	D - 5863 B	21	
Sodium, ppm	D - 5863 B	39	
Nitrogen, wt%	D - 5762	0.233	
Ashphaltenes, wt%	IP - 143	1.19	
Carbon Res.,Ramsbottom on 10% bottom	D - 189	10.93	
SPRAGUE PROVIDES THE ATTACHED INSPECTION REPRESENTING THE SPECIFICATIONS OF THE FERMINAL IN TANK ON THE DATE OF INSPECTION THIS ANALYSIS IS PROVIDED TO THE CUSTOME ESTABLISHING THE INDEPENDENTLY VERIFIED A COMPOSITE BASIS IN SPRAGUES TERMINAL SECTION OF THE STANDARD OF	PRODUCT AT THE SPRAGUE ON NOTED ON THE CERTIFICATE. R FOR THE PURPOSE OF PRODUCT SPECIFICATION ON SHORE TANK AS NOTED ON THE		
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<sup>\*\*</sup> Annotates Analysis Contracted Out

<sup>\*\*\*</sup> Annotates Loadport information- this test was not performed by Inspectorate